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Unraveling investment herds: Bandarmology and millennial investors in Indonesia

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Abstract

This study aims to investigate the impact of the concept of "bandarmology" or herd behavior (HB) on the investment decisions of millennial stock investors in Indonesia who are influenced by influencer Anton Swandana. The research adopts a quantitative approach with an ex post facto method and uses the Partial Least Square (PLS) analysis technique to test the hypothesis. Data was collected through a questionnaire distributed via Google Forms to 100 respondents of millennial stock market investors selected by the quota sampling technique. The results indicate that source credibility, herd behavior, risk perception, and emotional response have a significant effect on investment behavior intention. This research contributes to the field of stock investment in Indonesia by providing a deeper understanding of the behavior of millennial stock investors and the factors that influence their investment decisions.
***Keywords**: bandarmology, herd behavior, millennial stock investors, investment decisions, stock influencers*

Introduction

Some individuals, instinctively, tend to follow the actions, behavior, or decisions of others in certain situations. This situation arises as a consequence of the individual's limited knowledge and limited understanding of the available information(Jiang & Du, 2016). The phenomenon where these individuals make decisions based on actions taken by other group members is known as herd behavior or (HB) "herd behavior" (Ha et al., 2016; Kang et al., 2020). In this behavioral conceptual framework, when individuals are faced with the influence of a group, they tend to change their viewpoints, judgments, and overall behavior. This is caused by individual efforts to achieve harmony and consistency with the majority of members in the group. Several previous studies have observed herd behavior in various consumer contexts, such as in the insurance market, restaurant visitors, real estate property buyers, as well as in market contexts finance (F. Liu 2015; Ha et al., 2016; Jiang & Du 2016; Choijil et al., 2022).

This research allocates its focus to the analysis of group behavior manifested in the context of financial markets, with special emphasis on stock markets. In a broad context, financial markets are divided into two main entities

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that stretch along the economic dimension, namely money markets and capital markets (Kusnandar & Bintari, 2020). The growth of the capital market which is correlated with an increase in individual understanding regarding the profits that can be obtained through investment, especially in terms of capital gains, namely profits that arise due to the difference between the share price at the time of purchase and the price at the time of sale Tolliver et al., (2020), is the main focus of attention. in this research. However, as time goes by, a striking phenomenon has emerged and gained attention over the last few years, especially in connection with the Covid-19 pandemic period that has hit the world. The emergence of a large number of investors from the millennial generation in this period is associated with the restrictions in face-to-face interactions that apply (Sari, 2021). Although this change was first identified in Indonesia, its impact has spread to various corners of the world, including countries such as Finland, England, and India, which reinforces the urgency and relevance of this phenomenon in a global context (Talwar et al., 2021; Liu et al., 2021; Wani & Anwar, 2021).

A review of previous literature noted that in 2021, the growth in the number of investors in Indonesia showed an increase of 57.2 percent compared to the previous year, which was 2020 (Gunanti & Mahyuni, 2022). In this context, it is important to note that the dominant investor in this growth is the millennial generation, which reaches around 26.24 percent, which refers to the group of individuals with an age range between 21 and 30 years (Audrey, 2021). This phenomenon shows that there are other factors that play a role in encouraging growth in the number of investors, which can be caused by positive developments in the information technology sector, apart from the impact of the Covid-19 pandemic.

The millennial generation, as a group that is the focus of attention in this context, has several distinctive characteristics that influence their investment decisions. One characteristic that is worth noting is their high dependence on the use of smartphones as a means of communication and access to information (Thompson, 2017). In addition, millennials show a strong preference for non-cash payments, reflecting the trend of using more modern payment methods (Bailey et al., 2020). Apart from that, almost all members of the millennial generation are known to have accounts on various social media platforms (Ahmed, 2019). Thus, it can be concluded that the millennial generation is a very technologically literate group of people, which significantly influences the dynamics of the investment market.

Previous literature reviews have revealed a significant correlation between technological progress and the resulting impact on stock market development (Lee, 2019; Qu et al., 2017). For example, in a study conducted by Panos and Wilson (2020), it has been proposed that financial literacy and understanding regarding investment can be improved by utilizing information technology as a tool that makes it easier to access information and knowledge. Finally, this can trigger an increase in individual interest in investing in the stock market (Mouna & Anis, 2017).

In the context of the development of millennial generation investor behavior, the role of technology has proven to be a very influential factor. This is due to the emergence of various analytical methods in the world of investment

Naim et al., (2021), which contrasts with the previous period where stock market players mainly relied on two main analytical methods, namely fundamental analysis and technical analysis (Makkulau & Yuana, 2021). There are various comparisons in previous literature regarding the strengths and weaknesses of each of these analytical methods Nti et al., (2020); Petrusheva and Jordanoski (2016), which provide in-depth insights regarding the role of technology in changing the way individuals predict and manage their investments in the stock market .

The innovative method known as “bandarmological” analysis is an approach that focuses attention on transactions that occur in financial markets, which is very different from the focus on changes in stock prices and company conditions which has become conventional in investment analysis (Husnatarina & Ramadhan, 2021). The basic concept of this method is that investors observe and identify transactions made by large players, known as “bookies.” With this method, if a dealer decides to make a purchase, the investor will imitate a similar action by making a purchase, and vice versa, if the dealer decides to sell, the investor will also respond by selling (Naim et al., 2021). Through this approach, opportunities open up for investors who may still be neophytes in their knowledge regarding the stock market to quickly and efficiently project profitable results (Jonkarlo et al., 2022).

In the context of investing in the stock market, recognition of the potential profits that can be obtained is in line with the understanding of the inevitable risks(Talarico & Reniers, 2016). This concept is a basic principle known to all investors. However, it should be noted that individual perceptions of the level of risk may vary, depending on emotional responses influenced by personal factors (Ning et al., 2020; Visschers & Siegrist, 2018). This research ultimately refers to a framework that considers risk perception as a central variable, which will be used as the basis for assumptions in the research model currently being worked on.

Almost the entire spectrum of investment types shows uncertainty as one of the dominating characteristics. In an effort to deal with this uncertainty, investors systematically try to formulate their investment decisions through rational considerations, where these decisions are driven by mathematical calculations and assessments based on existing empirical data (Forbes et al., 2015). However, it needs to be emphasized that in the investment decision making process, there are a number of limitations that act as limiting factors which include the individual's cognitive ability, level of knowledge possessed, as well as the impact caused by external factors in the investment environment (Violeta & Linawati, 2019). Not only that, it is important to realize that social context also plays a significant role in shaping investors' thinking and feelings, with the potential to influence the investment decision-making process (Akhtar et al., 2018).

It is important to recognize that, in practice, investors often find themselves making investment decisions in shares that are influenced by emotional aspects, which include feelings and mood factors that ultimately play a role in forming their beliefs. This is often influenced by a number of factors including the sources of information used in their investment analysis (Diouf et al., 2016). There are groups of investors who tend to trust and follow information that comes from individuals who are seen as experts or influential in the realm of stock investment, while there are also those who may doubt the credibility of the information source in question Regita (2022). In line with this phenomenon, there is an assumption that the level of credibility of the information source used can act as a predictive factor in shaping investors' emotional responses.

The existence of complex dynamics related to the participation of new investors in financial markets has become the subject of attention in a number of literature reviews. The problem that arises is related to a number of investors, because of their limited understanding of investment, experiencing significant losses due to inappropriate investment policies (Firmansah, 2022). This development is exacerbated by the tendency of these investors to rely on information and investment guidance provided by individuals known as influencers (Talwar et al., 2021). Following the rapid growth in the number of investors from the millennial generation, this phenomenon has inspired the emergence of more and more individuals who claim to be "investment influencers" (Tazkia & Wijayanti, 2022).

Not only that, in the context of the influence generated by influencers on investment behavior, other literature studies also note that influencers have a significant impact in encouraging the interest of new investors to engage in investment activities (Wicaksono et al., 2022). In Indonesia, several well-known influencers include Raditya Dika, famous as a comedian and YouTuber, and Kaesang Pangarep, who is the son of the President of the Republic of Indonesia, Joko Widodo. While both have wide followings, it's worth pointing out that they generally do not explicitly provide recommendations to buy or sell specific stocks in their investment guides.

The research currently being carried out aims to explore and analyze the behavior of stock followers who are influenced by influencers in the investment world, especially those who receive specific recommendations regarding certain stocks. Within the framework of this research, the author has chosen an "investment specialist" Mirae Asset Sekuritas as a "stock influencer" who has a "YouTube" channel named Anton Swandana, as an individual who is active in sharing information about shares for purchase or is used to explicitly giving messages -messages leading to the sale of certain shares. Therefore, the author believes that the followers or "followers" who form the community in the Mirae Asset Securities "WhatsApps" group are relevant subjects to be used as data sources in this research.

It should be emphasized that in the context of the available investment literature, studies that sample and analyze various types of investors in relation to “bandarmological” analysis approaches are still relatively limited. Most previous literature studies tend to limit themselves to considering the advantages or disadvantages of using “bandarmological” analysis when compared with alternative analysis methods (Ardhianto et al., 2022; Badri et al., 2022). There are also more in-depth studies related to stock price movements related to the concept of “bandarmology” (Tobing et al., 2019). Thus, in this study, there is a significant research contribution demonstrated by focusing on the vulnerability of stock influencer followers in responding to investment recommendations. Thus, there is underlying research value in bridging existing knowledge gaps. All variables in this research model are arranged based on the perspective of investor behavior and actions. This research emphasizes the emotional response of investors when obtaining information using "bandarmological" analysisResearch Methods

Based on the theoretical and empirical studies described previously, the research framework and hypothesis can be seen in Figure 1.

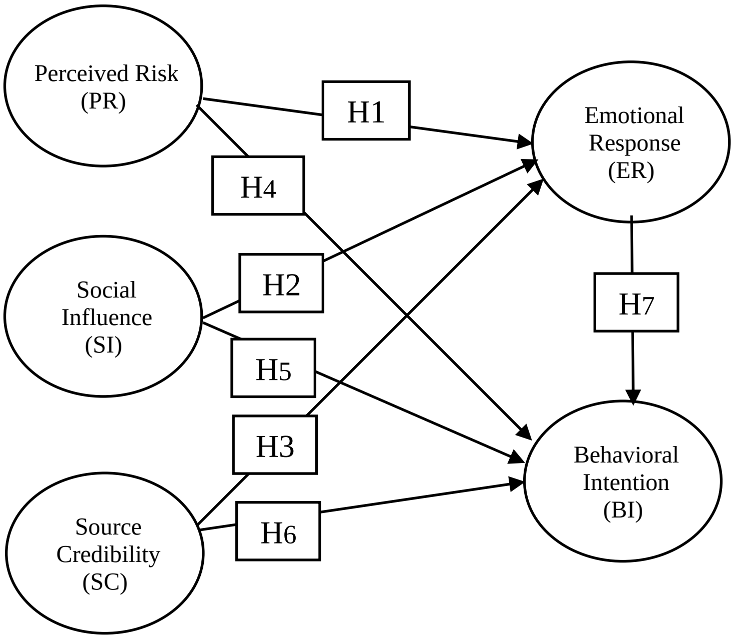

Figure 1. Research Framework

Based on previous research, perceived risk has a significant and positive impact on individual emotional responses in the context of investment decision making. Loss aversion and regret aversion were found to have a significant and negative impact on individual trading frequency. In addition, risk perception moderates the relationship between loss aversion and regret aversion with trading frequency. This hypothesis describes a more detailed relationship based on previous research findings, showing the direction and significance of the impact of perceived risk variables and certain aspects of emotional response (Shah & Malik, 2021). The study on millennial stock investors in Indonesia shows that the perceived risk is antecedents that impact emotional response (Bharata et al., 2023).

H1: Perceived Risk (PR) has a significant and positive impact on Emotional Response (ER).

From previous research, there is an influence of social influence on emotional responses in the context of crowdfunding investment decisions. When individuals face a situation where their willingness to invest differs significantly from the group, they are more likely to follow the group's decision (Zheng et al., 2021). Additionally, an individual's level of confidence in their initial decision will moderate the relationship between social influence and emotional response, with low levels of confidence increasing the tendency to follow the group's decision. The study on millennial stock investors in Indonesia shows that the social influence is antecedents that impact emotional response

(Bharata et al., 2023).
H2: Social Influence (X2) has a significant and positive impact on Emotional Response (Y1).

Based on previous research conducted by Farkas and Keshk (2019), it can be assumed that source credibility has a significant influence on investors' emotional responses. Previous research found that disclosure platforms influence investors' emotional reactions when company news is negative. Therefore, it can be assumed that source credibility, which is a major factor in assessing the reliability of information, can influence investors' emotional responses to corporate news. Based on these findings, this hypothesis was formulated: The higher the credibility of the information source, the more positive investors' emotional response to company news. Conversely, the lower the credibility of the information source, the more negative investors' emotional response to company news. The study on millennial stock investors in Indonesia shows that the source credibility is antecedents that impact emotional response (Bharata et al., 2023).
H3: Source Credibility (SC) has a significant and positive impact on Emotional Response (ER).

Based on previous research on 56 investors in capital market, showed that perceived risk and herding behavior had a positive effect on investment intentions (Agustina et al., 2022). Other research shows that risk experienced as assessed by the Glejser test has a positive and significant effect on behavioral intentions to reuse the Shopee online shopping application (Dyki Bungang, 2010). Another study using 106 respondents who were members of the Facebook home credit forum in Bandung City showed that perceived risk has a positive effect on behavioral intention (Nurjulia, 2023).
H4: Perceived Risk (PR) has a significant and positive impact on Behavioral Intention (BI).

Previous research that examined the intention to invest in P2P lending platform specifically food sector of SMEs in Jakarta, shows that social influence and reputation platform have a positive effect on trust. Meanwhile, trust has a positive effect on investment intention and investment intention has positive effect on actual investment (Soeta et al., 2023). Other research has proven the influence of social influences on behavioral intention to use a new technology or system. Research of Venkatesh et al. (2003) found that social influence has a significant positive influence on behavioral intention to use mobile internet (Venkatesh et al., 2003). Other research proves that social influences influence behavioral intention to use mobile banking (Giovanis et al., 2019).
H5: Social Influence (SI) has a significant and positive impact on Behavioral Intention (BI).

Previous research that aimed to analyze the effect of investor perceptions on stock influencers' credibility on herding behavior, showed that the credibility of stock influencers positively affects herding behavior (Anshori et al., 2024). Other research found that characteristics of source credibility, such as source expertise, trustworthiness and homophily of the communication source,

platform managers can enhance information adoption and intention to buy. That result provides practical guidance for marketers based on detailed analysis of specific factors influencing consumers' behaviour, which will enhance marketing activities (Ismagilova et al., 2020). Other results underline the importance of source credibility in influencing consumer attitude change and behavior over continued exposure to credible social media content (Jia, 2022).
H6: Source Credibility (SC) has a significant and positive impact on Behavioral Intention (BI).

Previous research , the study on millennial stock investors in Indonesia shows that emotional response is a strong predictor that can change the behavior of stock investors (Bharata et al., 2023). Other research on 56 investors in capital market, shows that herding behavior had a positive effect on investment intentions (Agustina et al., 2022).
H7: Emotional Response (ER) has a significant and positive impact on Behavioral Intention (BI).

Methods

This research adopts a quantitative paradigm with an ex post facto approach, a research method that does not involve variable manipulation or special treatment (Widarto & Pd, 2013). This method was chosen to test the hypothesis without involving the researcher's influence on the observed variables. The main focus of this research is to explore the potential for discovering cause-and-effect relationships related to a particular phenomenon (Khaldi, 2017). Thus, this study aims to investigate the relationships that may exist between certain variables in the absence of direct intervention. This approach provides the opportunity to analyze and understand natural phenomena that occur without the intervention of researchers, providing confidence in research results that may reflect the genuine dynamics of the phenomenon.

The population of this research subject was not known with certainty at the start of the research. In particular, this research does not separate or classify based on gender, so it covers all gender groups, both men and women. This research limits its scope by exclusively focusing on millennial generation investors in Indonesia who actively follow investment developments through influencer Anton Swandana. Anton Swadana is Professional Capital Market who has Certified Technical Analysis. He also an investment story telling who may followers.The selection of respondents was carried out by taking a sample of 100 people using a quota sampling technique. With this approach, research seeks to detail and understand the perceptions and behavior of millennial investors who are influenced by certain influencers in making their investment decisions.

The data collection process was carried out through distributing questionnaires via Google Forms to respondents who had been selected according to the criteria previously described. In measuring the variables involved, this research utilizes a differential semantic measurement scale, which provides a deeper dimension to the subject's perception and response to the observed variables. For data analysis, the inferential method was chosen because it is probability in nature, where the conclusions generated from the sample are applied to the population in general (Hadi et al., 2018). In this context, the inferential statistical analysis technique applied to test research hypotheses is Partial Least Square (PLS), an approach that provides the ability to evaluate relationships between variables by considering the dependencies and interdependencies between them. PLS provides a comprehensive and in-depth analytical basis for exploring and testing relationships between variables within the framework of this research.

This research involves three independent variables, namely perceived risk (PR), social influence (SI), source credibility (SC), while emotional response (ER) and behavioral intention (BI) (stock investment) are the dependent variables in this research analysis. Independent Variables: 1) Perceived Risk (PR): This variable describes investors' perceptions of risk in investing, including security risk, financial risk and psychological risk. Indicators: investing in shares requires time and thought, investment in the stock market is safe and the rate of return on stock investment is proportional to the risk borne; 2) Social Influence (SI): This variable evaluates the extent to which social influence, both external and interpersonal, influences investors' decisions to follow an influencer. Indicators: investor confidence in doing things that are considered profitable, investor beliefs regarding what can and cannot be done in investing, investors take the same actions as everyone else, and the environment around investors encourages taking action; 3) Source Credibility (SC): This variable measures investor confidence in the credibility of information sources, especially in the context of communication via internet media. Indicators: the personalities of stock influencers have their own charm, stock influencers demonstrate a commitment to promoting a particular stock, and stock influencers have strong analytical skills

Dependent Variables: 1) Emotional Response (ER): This variable reflects investors' emotional response to information in investment decisions. Indicators: investors love to invest in shares, investors feel high enthusiasm in investing in shares and investors have the hope of making a profit when investing in shares.; 2) Behavioral Intention (BI): This variable reflects the investor's intention or desire to behave or take certain actions in the investment context. Indicators: investors often leave positive comments on stock influencers, investors feel motivated to follow stock influencers. And investors plan to follow stock influencers in the future.

Result and Discussions

In this chapter, the research results will be presented which include data analysis and the main findings obtained from this research. Data analysis was carried out using the Partial Least Square (PLS) method, which allows researchers to explore and test the relationships between previously identified variables. The results of this research provide in-depth insight into the influence of the independent variable on the dependent variable, so that it can make a significant contribution to understanding the behavior of millennial investors in making investment decisions in the stock market.

Table 1. Variables and Indicators

Variables	Indicator	Code
Perceived Risks	Investing in shares requires time and thought	PR1
	Investment in the stock market is safe	PR2
	The rate of return and risk borne are comparable in investing in shares	PR3
Social Influence	Investors' beliefs regarding things that are considered profitable in investing	SI1
	Investor confidence in what to do and what not to do when investing in shares	SI2
	Investors did the same thing others	SI3
	The surrounding environment drives investors' decisions to invest	SI4
Source Credibility	The influencer's personality is attractive to KS1 investors	SC1
	Influencers promote specific stocks	SC2
	Influencers have strong analytics	SC3
Emotional Response	Investors like investing in shares	ER1
	Investor enthusiasm is high in investing	ER2
	Investors hope for fast and big profits on	ER3
Behavioral Intention	Investors leave positive comments on stock influencers	BI1
	Motivated investors follow stock influencers	BI2
	Investors plan to continue following stock influencers	BI3

The direct effect test results (Table 2) show a direct relationship between variables in the research model. From the path coefficients matrix, it can be seen that the Source Credibility (SC) variable has a significant positive influence on Behavioral Intention (BI) with p value of 0.000. This indicates that the higher the credibility of the information source, the greater the social influence experienced by investors. Apart from that, Source Credibility (SC) also has a positive influence on Emotional Response (ER) with p value of 0.000. This indicates that the level of credibility of the information source also contributes to investors' emotional responses in the context of investment decision making.

Table 2. Direct Effect Value

	Path Coefficients	P-Value	Conclusion
SC -> BI	0.583	0.000	Significant
SC -> ER	0.320	0.000	Significant
PR -> BI	-0.132	0.124	Not significant
PR -> ER	0.165	0.091	Not Significant
SI -> BI	-0.057	0.554	Not significant
SI -> ER	0.473	0.000	Significant
ER -> BI	0.321	0.013**	Significant

However, the Perceived Risk (PR) variable does not show a significant influence on Behavioral Intention (BI) with p value of 0.124. Since Perceived Risk does not significantly influence Behavioral Intention, it suggests that individuals' intentions to engage in a behavior are not heavily impacted by their perceptions of risk.This could mean that other factors, such as perceived benefits, might be more important in shaping. The Perceived Risk (PR) variable also does not have a significant influence on Emotional Response (ER) with p value of 0.091. The lack of significant influence of Perceived Risk on Emotional Response suggests that individuals' emotional reactions are not strongly affected by how risky they perceive a situation to be. This could imply that emotional responses are more driven by other factors, such as personal experiences, inherent personality traits, or specific situational contexts. For investors who have a risk-seeker character, they will not pay too much attention to perceived risk.

The Social Influence (SI) variable does not shows a significant influence on Behavioral Intention (BI) with p value of 0,554.. However, Social Influence (SI) has a significant positive influence on Emotional Response (ER) with p value of 0.000. This means that the higher the social influence, the greater the emotional response that occurs in investors.

Finally, the Emotional Response (RE) variable shows a significant positive influence on Behavioral Intention (BI) with p value of 0.013. This suggests that investors' emotional responses influence the level of social influence experienced by them. Overall, the results of the direct effect test provide a deeper understanding of how the main variables in this research interact with each other and contribute to the investment behavior of millennial investors.

Table 3. Indirect Effect Value

	Path Coefficient	P-Value	Conclusion
SC -> ER -> BI	0.098	0.030	Significant
PR -> ER -> BI	0.044	0.198	Not significant
SI -> ER -> BI	0.143	0.021	Significant

The results of the indirect effect test (Table 3) show the indirect impact of the variables Source Credibility (SC), Perceived Risk (PR), and Social Influence (SI) on Behavioral Intentions (BI) through the intermediary Emotional Response (ER). In this context, specific indirect effects measure the extent to which the influence of the independent variable flows to the mediator variable before reaching the dependent variable. It was found that the Source Credibility (SC) variable had a significant positive indirect impact on Behavioral Intention (BI) through the intermediary Emotional Response (ER) of 0.098. This means that the level of credibility of the information source not only directly influences investors' emotional responses but also indirectly contributes to the social influence experienced by investors.

Meanwhile, the Perceived Risk (PR) variable has a lower positive indirect impact on Behavioral Intention (BI) through the intermediary Emotional Response (ER) of 0.044. This suggests that the influence of risk perception on investors' behavioral intentions is mainly mediated by the resulting emotional response. In addition, the Social Influence (SI) variable has the most significant positive indirect impact on Behavioral Intention (BI) through the intermediary Emotional Response (ER) of 0.143. This means that social influence not only has a direct effect on investors' emotional responses but also indirectly increases the behavioral intentions of millennial investors in making their investment decisions.

Social Influence has a direct effect on Emotional Response, it means that social interactions, such as the opinions of friends, family, or influencers, significantly influence how millennial investors perceive their emotions related to investing. This is in line with research of Venkatesh et al. (2003) found that social influence has a significant positive influence on behavioral intention to use mobile internet (Venkatesh et al., 2003). Other research proves that social influences influence behavioral intention to use mobile banking (Giovanis et al., 2019).

For example, recommendations or support from people around them can increase their confidence, enthusiasm or interest in investing. This research also show that indirect influence of Social Influence on Behavioral Intention through Emotional Response, it means Emotional Response functions as a mediator in the relationship between Social Influence and Behavioral Intention. In other words, Social Influence influences Behavioral Intention not only directly but also through its influence on Emotional Response. For example, when a millennial investor feels more confident and emotionally motivated due to the social influence they receive, they are more likely to have stronger intentions to invest.

Overall, the results of the indirect effect test provide additional insight into the complex paths of influence between the main variables in the model, highlighting the important role of Emotional Response (ER) as a mediator in the relationship between the variables Source Credibility (SC), Perceived Risk (PR), and Social Influence (SI) with Behavioral Intentions (BI).

Conclusion

The research results show: 1) The credibility of the information source has a significant positive influence on investors' behavioral intentions and emotional responses. This emphasizes the importance of investor trust in information sources in making investment decisions. The implication is that decision makers in the financial industry need to pay attention to efforts to increase credibility and public trust in the information they convey, such as through providing strong analysis and selecting influencers who have a good reputation; 2) Perception risk does not have a significant influence on investors' behavioral intentions and investors' emotional responses. This could mean that other factors, such as perceived benefits, might be more important in shaping; 3) Social influence does not shows a significant influence on behavioral intentions, but has a significant positive influence on investors' emotional responses. This suggests that social factors may influence investors to feel less individually motivated, but have a significant impact on their emotional responses. The implication is that marketing and communications strategies must consider how social influence can be used to influence investor behavior, while remaining mindful of the risk of its negative influence on behavioral intentions; 4) The emotional responses have a significant positive influence on behavioral intentions. This suggests that emotions play an important role in shaping investors' behavioral intentions. The implication is that investment managers and financial advisors need to take emotional aspects into account in their communications with investors, and provide solutions or strategies that can manage and exploit these emotions for long-term gain.

Implications of research: 1) Marketing and Communication Strategy

Development: These findings show the importance of paying attention to the credibility of information sources, social influence, and emotional factors in developing marketing and communication strategies to attract and retain millennial investors. Efforts to increase the credibility of information sources and utilize social influence can be effective strategies; 2) Risk Management and Emotions: Investment managers and financial advisors need to recognize the important role that risk perception and emotional responses play in investment decision making. They must develop strategies to manage and mitigate the negative impacts of high risks and emotions, while harnessing their positive potential; 3) Developing Relationships with Investors: Based on findings on social influence, it is important for investment managers and financial advisors to build strong relationships with millennial investors. This can be done by understanding the social factors that influence their behavior and tailoring their communications and services according to investors' needs and preferences; 4) Product and Service Development: These findings can also serve as a basis for the development of new products and services that take into account factors such as the credibility of the information source, social influence, and emotional response. Products and services designed with these aspects in mind can be more attractive to millennial investors and increase their involvement in financial markets. By paying attention to the findings and implications of this research, stakeholders in the financial industry can take appropriate steps to understand and accommodate the investment behavior of millennial investors, as well as improve the quality of the services and products they offer.

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